BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Asphalting to Sainagara phase-I and surrounding ares in ward no-03 Yelahanka satellite Town sub Division

Estimation Cost.Rs 20000000.00

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
1.00	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	Sainagar Phase-III								
	6th Cross Road	Cum	2.00	115.00	0.90	1.05	217.35		
	5th Cross Road	Cum	2.00	114.00	0.90	1.05	215.46		
	4th Cross Road	Cum	2.00	113.00	0.90	1.05	213.57		
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	2.00	139.00	0.90	1.05	262.71		
	For Rain water Harvesting								
	For New Drain Portion	Cum	5.00	0.31		1.80	2.81		
				(3.142*0.63*0.63)/4=0.31					
	New Culvet								
	Sainagar Phase-III	Cum	1.00	5.50	1.80	1.10	10.89		
	Over burden soil on road								
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	2.00	139.00	0.60	0.45	75.06		
	1st Cross Road	Sqm	2.00	65.00	0.60	0.45	35.10		
	Sainagar Phase-III								
	6th Cross Road	Cum	2.00	115.00	0.60	0.45	62.10		
	5th Cross Road	Cum	2.00	114.00	0.60	0.45	61.56		
	4th Cross Road	Cum	2.00	113.00	0.30	0.45	30.51		
	Basic rate	130.00							
	Area weightage 6%	7.80							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	207.60							
	Total						**1187.12**	**207.60**	**246445.26**
2.00	KSRRB M2100 PCC 1 KSRRB M2100-10. Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications.MORTH Specification No. 2100 Pg no:222 Item no:27.18								
	New Drain								
	Sainagar Phase-III								

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	6th Cross Road	Cum	2.00	115.00	0.90	0.15	31.05		
	5th Cross Road	Cum	2.00	114.00	0.90	0.15	30.78		
	4th Cross Road	Cum	2.00	113.00	0.90	0.15	30.51		
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	2.00	139.00	0.90	0.15	37.53		
	New Culvet								
	Sainagar Phase-III	Cum	1.00	5.50	1.80	0.15	1.49		
	Basic rate	5115.00							
	Area weightage 6%	306.90							
	Sub Total	5421.90							
	Total						**131.36**	**5421.90**	**712193.67**
3.00	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	New Drain								
	Sainagar Phase-III								
	6th Cross Road								
	Bottom Slab	Cum	2.00	115.00	0.90	0.15	31.05		
	Side Walls	Cum	4.00	115.00	0.15	0.75	51.75		
	5th Cross Road								
	Bottom Slab	Cum	2.00	114.00	0.90	0.15	30.78		
	Side Walls	Cum	4.00	114.00	0.15	0.75	51.30		
	4th Cross Road								
	Bottom Slab	Cum	2.00	113.00	0.90	0.15	30.51		
	Side Walls	Cum	4.00	113.00	0.15	0.75	50.85		
	Naidu Layout (Jyothinagar)								
	Cross Road								
	Bottom Slab	Cum	2.00	139.00	0.90	0.15	37.53		
	Side Walls	Cum	4.00	139.00	0.15	0.75	62.55		
					Sub Total		**346.32**		
	New Culvet								
	Sainagar Phase-III								
	Bottom Slab	Cum	1.00	5.50	1.80	0.20	1.98		
	Side Walls	Cum	2.00	5.50	0.20	0.75	1.65		
					Sub Total		**3.63**		
	Basic rate	6670.00							
	Area weightage 6%	400.20							
	Sub Total	7070.20							
	Total						**349.95**	**7070.20**	**2474216.49**
4.00	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum	**From item No 03**				**346.32**		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
		kg	Steel assumed 60Kg/Cum of Concrete				20779.20		
		tonne					20.78		
	For Culvert	Cum	From item No 03				3.63		
		kg	Steel assumed 90Kg/Cum of Concrete				326.70		
		tonne					0.33		
	Basic rate	68233.00							
	Area weightage 6%	4093.98							
	Sub Total	72326.98							
	Total						**21.11**	**72326.98**	**1526526.01**
5.00	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Sainagar Phase-III								
	6th Cross Road	Sqm	2.00	115.00	0.90		207.00		
	5th Cross Road	Sqm	2.00	114.00	0.90		205.20		
	4th Cross Road	Sqm	2.00	113.00	0.90		203.40		
	Naidu Layout (Jyothinagar)								
	Cross Road	Sqm	2.00	139.00	0.90		250.20		
	Data rate	**2337.00**							
	Total						**865.80**	**2337.00**	**2023374.60**
6.00	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc.,								
	New Culvet								
	Sainagar Phase-III	Sqm	1.00	5.50	1.80		9.90		
	Data rate	**5418.00**							
	Total						**9.90**	**5418.00**	**53,638.20**
7.00	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	For Tree Pot								
	Sainagar Phase-1								
	1st Cross Road	Cum	35.00	4.80	0.20	0.05	1.68		
	4th Cross Road	Cum	35.00	4.80	0.20	0.05	1.68		
	Dwarka Mandira Temple Road	Cum	20.00	4.80	0.20	0.05	0.96		
	Cross Road	Cum	35.00	4.80	0.20	0.05	1.68		
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	32.00	4.80	0.20	0.05	1.54		
	Sainagar Phase-III								
	6th Cross Road	Cum	22.00	4.80	0.20	0.05	1.06		
	5th Cross Road	Cum	20.00	4.80	0.20	0.05	0.96		
	4th Cross Road	Cum	10.00	4.80	0.20	0.05	0.48		
					Sub Total		**10.03**		
	Basic rate	5422.00							

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Area weightage 6%	325.32							
	Sub Total	5747.32							
	Total						**10.03**	**5747.32**	**57657.11**
8.00	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	For Tree Pot								
	Sainagar Phase-I								
	1st Cross Road		35.00	4.80			168.00		
	4th Cross Road		35.00	4.80			168.00		
	Dwarka Mandira Temple Road		20.00	4.80			96.00		
	Cross Road		35.00	4.80			168.00		
	Naidu Layout (Jyothinagar)								
	Cross Road		32.00	4.80			153.60		
	Sainagar Phase-III								
	6th Cross Road		22.00	4.80			105.60		
	5th Cross Road		20.00	4.80			96.00		
	4th Cross Road		10.00	4.80			48.00		
					Sub Total		**1003.20**		
	Total length						1003.20		
	No of Kerb Stones	Nos	Total Length/0.45				2229.33		
	Sub Total	Nos					**2229.33**		
	Basic rate	408.00							
	Area weightage 6%	24.48							
	Sub Total	432.48							
	Total						**2229.33**	**432.48**	**964142.08**
9.00	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. litem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	For Tree Pot								
	Sainagar Phase-I								
	1st Cross Road	Sqm	35.00	4.80		0.40	67.20		
	4th Cross Road	Sqm	35.00	4.80		0.40	67.20		
	Dwarka Mandira Temple Road	Sqm	20.00	4.80		0.40	38.40		
	Cross Road	Sqm	35.00	4.80		0.40	67.20		
	Naidu Layout (Jyothinagar)								
	Cross Road	Sqm	32.00	4.80		0.40	61.44		
	Sainagar Phase-III								
	6th Cross Road	Sqm	22.00	4.80		0.40	42.24		
	5th Cross Road	Sqm	20.00	4.80		0.40	38.40		
	4th Cross Road	Sqm	10.00	4.80		0.40	19.20		
	Basic rate	80.00							
	Area weightage 6%	4.80							
	Sub Total	84.80							
	Total						**401.28**	**84.80**	**34028.54**

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
10.00	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	Road cut portion								
	Sainagar Phase-I								
	1st Cross Road	Cum	2.00	132.00	0.50	0.23	30.36		
		Cum	1.00	15.00	0.90	0.23	3.11		
	4th Cross Road	Cum	2.00	30.00	0.90	0.23	12.42		
	Dwarka Mandira Temple Road	Cum	1.00	50.00	0.80	0.23	9.20		
		Cum	1.00	20.00	0.50	0.23	2.30		
	Temple Left Side	Cum	1.00	10.00	0.60	0.23	1.38		
	Cross Road	Cum	1.00	60.00	1.00	0.23	13.80		
	Basic rate	41.00							
	Area weightage 6%	2.46							
	5Km lead= (2*1.28*5)	12.80							
	Sub Total	56.26							
	Total						**72.57**	**56.26**	**4082.51**
11.00	KSRRB 300-46. Scarifying by mechanical means stone metal crust 50mm to 100mm thick with pick axes along with premix carpet / surface dressing and stacking of old serviceable materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3.No. 19.52 page no.146								
	Naidu Layout (Jyothinagar)								
	Cross Road	Sqm	1.00	139.00	6.90		959.10		
	1st Cross Road	Sqm	1.00	65.00	5.60		364.00		
	Sainagar Phase-III								
	6th Cross Road	Sqm	1.00	115.00	6.00		690.00		
	5th Cross Road	Sqm	1.00	114.00	6.80		775.20		
	4th Cross Road	Sqm	1.00	113.00	5.50		621.50		
	Basic rate	39.00							
	Area weightage 6%	2.34							
	Sub Total	41.34							
	Total						**3409.80**	**41.34**	**140961.13**
12.00	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305								
	Naidu Layout								
	Cross Road	Cum	1.00	139.00	6.90	0.30	287.73		
	1st Cross Road	Cum	1.00	65.00	5.60	0.30	109.20		
	Sainagar Phase-III								
	6th Cross Road	Cum	1.00	115.00	6.00	0.30	207.00		
	5th Cross Road	Cum	1.00	114.00	6.80	0.30	232.56		
	4th Cross Road	Cum	1.00	113.00	5.50	0.30	186.45		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Basic rate	325.00							
	Area weightage 6%	19.50							
	Sub Total	344.50							
	Total						**1022.94**	**344.50**	**352402.83**
13.00	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)								
	Naidu Layout (Jyothinagar)								
	Cross Road	Sqm	1.00	139.00	6.90		959.10		
	1st Cross Road	Sqm	1.00	65.00	5.60		364.00		
	Sainagar Phase-III								
	6th Cross Road	Sqm	1.00	115.00	6.00		690.00		
	5th Cross Road	Sqm	1.00	114.00	6.80		775.20		
	4th Cross Road	Sqm	1.00	113.00	5.50		621.50		
	Basic rate	6.00							
	Area weightage 6%	0.36							
	Sub Total	6.36							
	Total						**3409.80**	**6.36**	**21686.33**
14.00	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	1.00	139.00	6.90	0.15	143.87		
	1st Cross Road	Cum	1.00	65.00	5.60	0.15	54.60		
	Sainagar Phase-III								
	6th Cross Road	Cum	1.00	115.00	6.00	0.15	103.50		
	5th Cross Road	Cum	1.00	114.00	6.80	0.15	116.28		
	4th Cross Road	Cum	1.00	113.00	5.50	0.15	93.23		
	Basic rate	1882.00							
	Area weightage 6%	112.92							
	Sub Total	1994.92							
	Total						**511.47**	**1994.92**	**1020341.73**
15.00	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Road cut portion								
	Sainagar Phase-I								
	1st Cross Road	Cum	2.00	132.00	0.50	0.23	30.36		
		Cum	1.00	15.00	0.90	0.23	3.11		
	4th Cross Road	Cum	2.00	30.00	0.90	0.23	12.42		
	Dwarka Mandira Temple Road	Cum	1.00	50.00	0.80	0.23	9.20		
		Cum	1.00	20.00	0.50	0.23	2.30		
	Temple Left Side	Cum	1.00	10.00	0.60	0.23	1.38		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Cross Road	Cum	1.00	60.00	1.00	0.23	13.80		
	New Road								
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	1.00	139.00	6.90	0.23	220.59		
	1st Cross Road	Cum	1.00	65.00	5.60	0.23	83.72		
	Sainagar Phase-III								
	6th Cross Road	Cum	1.00	115.00	6.00	0.23	158.70		
	5th Cross Road	Cum	1.00	114.00	6.80	0.23	178.30		
	4th Cross Road	Cum	1.00	113.00	5.50	0.23	142.95		
	Basic rate	1888.00							
	Area weightage 6%	113.28							
	Sub Total	2001.28							
	Total						**856.82**	**2001.28**	**1714734.73**
16.00	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.158,I.No.21.1)								
	Road cut portion								
	Sainagar Phase-I								
	1st Cross Road	Sqm	2.00	132.00	0.50		132.00		
		Sqm	1.00	15.00	0.90		13.50		
	4th Cross Road	Sqm	2.00	30.00	0.90		54.00		
	Dwarka Mandira	Sqm	1.00	50.00	0.80		40.00		
		Sqm	1.00	20.00	0.50		10.00		
	Temple Left Side	Sqm	1.00	10.00	0.60		6.00		
	Cross Road	Sqm	1.00	60.00	1.00		60.00		
	New Road								
	Naidu Layout (Jyothinagar)								
	Cross Road	Sqm	1.00	139.00	6.90		959.10		
	1st Cross Road	Sqm	1.00	65.00	5.60		364.00		
	Sainagar Phase-III								
	6th Cross Road	Sqm	1.00	115.00	6.00		690.00		
	5th Cross Road	Sqm	1.00	114.00	6.80		775.20		
	4th Cross Road	Sqm	1.00	113.00	5.50		621.50		
	Basic rate	21.00							
	Area weightage 6%	1.26							
	Sub Total	22.26							
	Total						**3725.30**	**22.26**	**82925.18**
17.00	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Road cut portion	Sqm	From Item num 16				3725.30		
	for old Road Provide 15% Profile Correction	Sqm	from item no 18=(5239.90X15%)=785.99				785.99		
	Basic rate	32.00							

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Area weightage 6%	1.92							
	Sub Total	33.92							
	Total						**4511.29**	**33.92**	**153022.79**
18.00	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.158,I.No.21.2).								
	Old Roads								
	Sainagar Phase-I								
	1st Cross Road	Sqm	1.00	152.00	6.80		1033.60		
	4th Cross Road	Sqm	1.00	132.00	6.90		910.80		
	Dwarka Mandira Temple Road	Sqm	1.00	251.00	6.50		1631.50		
	Temple Left Side	Sqm	1.00	44.00	5.50		242.00		
	Cross Road	Sqm	1.00	237.00	6.00		1422.00		
					Sub Total		**5239.90**		
	New Road								
	Naidu Layout (Jyothinagar)								
	Cross Road	Sqm	1.00	139.00	6.90		959.10		
	1st Cross Road	Sqm	1.00	65.00	5.60		364.00		
	Sainagar Phase-III								
	6th Cross Road	Sqm	1.00	115.00	6.00		690.00		
	5th Cross Road	Sqm	1.00	114.00	6.80		775.20		
	4th Cross Road	Sqm	1.00	113.00	5.50		621.50		
					Sub Total		**3409.80**		
	Basic rate	5.00							
	Area weightage 6%	0.30							
	Sub Total	5.30							
	Total						**8649.70**	**5.30**	**45843.41**
19.00	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Old Road	Sqm	From Item num 18				5239.90		
	New Road	Sqm	From Item num 18				3409.80		
	Basic rate	12.00							
	Area weightage 6%	0.72							
	Sub Total	12.72							
	Total						**8649.70**	**12.72**	**110024.18**
20.00	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	old Road								
	for old Road Provide 15% Profile Correction		from item no18=(5239.90X15%)=785.99				5239.90		
		Cum		785.99		0.05	39.30		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	For Road Cut Portion								
	Sainagar Phase-I								
	1st Cross Road	Cum	2.00	132.00	0.50	0.05	6.60		
		Cum	1.00	15.00	0.90	0.05	0.68		
	4th Cross Road	Cum	2.00	30.00	0.90	0.05	2.70		
	Dwarka Mandira Temple Road	Cum	1.00	50.00	0.80	0.05	2.00		
		Cum	1.00	20.00	0.50	0.05	0.50		
	Temple Left Side	Cum	1.00	10.00	0.60	0.05	0.30		
	Cross Road	Cum	1.00	60.00	1.00	0.05	3.00		
	New Road								
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	1.00	139.00	6.90	0.05	47.96		
	1st Cross Road	Cum	1.00	65.00	5.60	0.05	18.20		
	Sainagar Phase-III								
	6th Cross Road	Cum	1.00	115.00	6.00	0.05	34.50		
	5th Cross Road	Cum	1.00	114.00	6.80	0.05	38.76		
	4th Cross Road	Cum	1.00	113.00	5.50	0.05	31.08		
	Basic rate	7008.00							
	Area weightage 6%	420.48							
	Sub Total	7428.48							
	Total						**225.56**	**7428.48**	**1675599.52**
21.00	Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications.Clause 507 of MORTH V revision as per IRC SP-53-2015 - using 40-60 TPH capacity HMP with mechanical Paver, Gr-II (30-45mm) with 5.4 % of modified bitumen binder consisting of 4.97% VG- 30 bitumen (60/70 grade) 0.43% Plastomeric Thermoplastics (Waste plastic Additive).(P.No-171I No-21.78.12)								
	Sainagar Phase-I								
	1st Cross Road	Cum	1.00	152.00	6.80	0.04	41.34		
	4th Cross Road	Cum	1.00	132.00	6.90	0.04	36.43		
	Dwarka Mandira Temple Road	Cum	1.00	251.00	6.50	0.04	65.26		
	Temple Left Side	Cum	1.00	44.00	5.50	0.04	9.68		
	Cross Road	Cum	1.00	237.00	6.00	0.04	56.88		
	New Road								
	Naidu Layout (Jyothinagar)								
	Cross Road	Cum	1.00	139.00	6.90	0.03	28.77		
	1st Cross Road	Cum	1.00	65.00	5.60	0.03	10.92		
	Sainagar Phase-III								
	6th Cross Road	Cum	1.00	115.00	6.00	0.03	20.70		
	5th Cross Road	Cum	1.00	114.00	6.80	0.03	23.26		
	4th Cross Road	Cum	1.00	113.00	5.50	0.03	18.65		
	Basic rate	8207.00							
	Area weightage 6%	492.42							
	Sub Total	8699.42							

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	Total						**311.89**	**8699.42**	**2713262.10**
22.00	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Sainagar Phase-I								
	1st Cross Road	Sqm	2.00	152.00	0.10		30.40		
	4th Cross Road	Sqm	2.00	132.00	0.10		26.40		
	Dwarka Mandira Temple Road	Sqm	2.00	251.00	0.10		50.20		
	Temple Left Side	Sqm	2.00	44.00	0.10		8.80		
	Cross Road	Sqm	2.00	237.00	0.10		47.40		
	New Road								
	Naidu Layout (Jyothinagar)								
	Cross Road	Sqm	2.00	139.00	0.10		27.80		
	1st Cross Road	Sqm	2.00	65.00	0.10		13.00		
	Sainagar Phase-III								
	6th Cross Road	Sqm	2.00	115.00	0.10		23.00		
	5th Cross Road	Sqm	2.00	114.00	0.10		22.80		
	4th Cross Road	Sqm	2.00	113.00	0.10		22.60		
	Basic rate	429.00							
	Area weightage 6%	25.74							
	Sub Total	454.74							
	Total						**272.40**	**454.74**	**123871.18**
23.00	KSRRB M800 Road markers/ Road stud , KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS (Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering thje lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97-DO III Dt 11.06.1997.The height, width and length shall not exceed 50mm, 100mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree.The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19mm and height not less than 30mm)from the body is to be a minimum value of 500kg. Fixing will be by drilling holes on the road for the shanks to go inside, without ails and using epoxy resin based adhesive as per manufacture's recommendation and complete as directed by the engineer.(P.No-187,I No-24.41)								
	Road Studs along Road Length								
	1st Cross Road		2.00	152.00			304.00		
	4th Cross Road		2.00	132.00			264.00		
	Dwarka Mandira Temple Road		2.00	251.00			502.00		
	Cross Road		2.00	237.00			474.00		
		Nos			**Sub Total**		**1544.00**		
	Provide Studs for every 3 m along Road lenth								
	Number of Studs along Road Length			**Total length/3**			**514.67**		

Sl No	Description of work		Mesurement				Qty	Rate	Amount
		Unit	No.	L	B	D			
	Basic rate	337.00							
	Area weightage 6%	20.22							
	Sub Total	357.22							
	Total						**514.67**	**357.22**	**183849.23**
	Rain Water Harvesting								
24.00	Filling in foundation with granite/trap broken metal 100mm and down size ,with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications.								
	a) 40mm Jelly	Cum	5.00	0.31		0.40	0.62		
				(3.142*0.63*0.63)/4=0.31					
	Total						**0.62**	**1901.00**	**1,185.33**
	b) 20mm Jelly	Cum	5.00	0.31		0.40	0.62		
				(3.142*0.63*0.63)/4=0.31					
	Total						**0.62**	**1901.00**	**1,185.33**
	c) Coarse sand	Cum	5.00	0.31		0.30	0.47		
				(3.142*0.63*0.63)/4=0.31					
	Total						**0.47**	**2651.00**	**1,239.73**
	d) Fine sand	Cum	5.00	0.31		0.20	0.31		
				(3.142*0.63*0.63)/4=0.31					
	Total						**0.31**	**2651.00**	**826.49**
	e) 12.5mm chips	Cum	5.00	0.31		0.30	0.47		
				(3.142*0.63*0.63)/4=0.31					
	Total						**0.47**	**1901.00**	**889.00**
25.00	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984-995 with latest amendments and conveying to work site including loading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle tee, stud ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for: HDPE Grade PE80-PN6.0, 630mm dia .(Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 code No K010Q)								
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth	Rmt	9.00				9.00		
			1.8*5=9						
	Sub Total	10822.32							
	Total						9.00	10822.32	97,400.88

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
26.00	Providing of Geonets for Rain Water Harvesting pit on the filter media as specified in drawings or as approved by Engineer Incharge								
		Sqm	5.00	0.31			1.56		
				(3.142*0.63*0.63)/4=0.31					
	Sub Total	71.03							
	Total						1.56	71.03	110.72
								Grand Total	16537666.29
								DPR Charges (1% of estimated cost)	200000.00
								Project management And Consultancy Charges(1% of estimated cost)	200000.00
								GST Charges (12% of estimated cost)	2256000.00
								KRIDL Charges (4% of estimated cost)	800000.00
								Miscellenious and rounding	6333.71
								Total Amount	20000000.00
								RUPEES TWO CRORE ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer
BBMP

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ಯಲಹಂಕ ಉಪವಿಭಾಗ, ಬಿ.ಬಿ.ಎಂ.ಪಿ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Executive Engineer
BBMP

RUDRAPRASAD CONSULTANTS BANGALORE

Administrative Sanction for Rs. 200.00 Lakhs
Two crore
is accorded under head P-3749
C.M. Nava nagarothana 110 Village
granted (Annexure-07)
Registered as CE No. ..... Subject
to conditions contained in enclosed memo
No EE/YNK/67/2019-20 Dt 7/11/2019

Engineer

Technical Sanction
Accorded For Rs 200 Lakhs
Head of A/C P 3749
CER NO : 209 Dt 08.11.19

TA CE (YNK)